

WHAT IS CLAIMED IS:

1. An air-conditioner for an automotive vehicle,
the air-conditioner comprising:

air-conditioner casing, disposed substantially
along a center line of the vehicle, into which air is
introduced from a front side of the vehicle;

an evaporator contained in the casing for cooling
the air introduced into the casing;

a heater core contained in the casing for heating
the air after the air is cooled by the evaporator;

a bypass passage formed in the casing for leading
the air from the evaporator, bypassing the heater core;

an air-mixing door contained in the casing for
controlling a ratio of an amount of hot air passing through
the heater core relative to an amount of cool air passing
through the bypass passage;

an air-mixing space formed in the casing for mixing
the hot air and the cool air;

a foot duct, formed in the casing, into which the
air mixed in the air-mixing space flows;

a foot opening for blowing out the air supplied
through the foot duct to a lower portion of a passenger;

a foot door for selectively opening or closing the
foot opening;

a face opening for blowing out the air supplied
from the air-mixing space to an upper portion of a
passenger;

a face-foot switching door for switching an airflow between the foot duct and the face opening;

a temperature sensor for sensing temperature in a passenger compartment;

an aspirator for drawing air in the passenger compartment to the temperature sensor, wherein:

the foot opening and the foot duct are disposed behind the air-mixing space at a rear side of the casing;

an air-introducing port of the aspirator is open to the foot duct at a position between the face-foot switching door and the foot door; and

when the face-foot switching door is brought to a position to fully open the face opening, the foot duct is not completely closed by the face-foot switching door but a small opening is left open in the foot duct while the foot opening is fully closed by the foot door.

2. The air-conditioner as in claim 1, wherein:

the aspirator is mounted on a rear wall of the casing, the rear wall extending in a right-to-left direction of the vehicle.

3. The air-conditioner as in claim 1, wherein:

the aspirator is mounted on a sidewall of the casing at a position between the face-foot switching door and the foot door, the sidewall extending in a front-to-rear direction of the vehicle.

4. An air-conditioner for an automotive vehicle,
the air-conditioner comprising:

air-conditioner casing, disposed substantially
along a center line of the vehicle, into which air is
introduced from a front side of the vehicle;

an evaporator contained in the casing for cooling
the air introduced into the casing;

a heater core contained in the casing for heating
the air after the air is cooled by the evaporator;

a bypass passage formed in the casing for leading
the air from the evaporator, bypassing the heater core;

an air-mixing door contained in the casing for
controlling a ratio of an amount of hot air passing through
the heater core to an amount of cool air passing through
the bypass passage;

an air-mixing space formed in the casing for mixing
the hot air and the cool air;

a foot opening formed on a sidewall of the casing,
the sidewall extending in a front-to-rear direction of the
vehicle, the foot opening blowing out air passing through
the air-mixing space to a foot portion of a passenger;

a foot door for selectively opening or closing the
foot opening;

a face opening for blowing out the air supplied
from the air-mixing space to an upper portion of a
passenger;

a face door for opening or closing the face opening;

a temperature sensor for sensing temperature in a passenger compartment;

an aspirator for drawing air in the passenger compartment to the temperature sensor, wherein:

air passing through the heater core flows through a hot air duct that is formed in a space between the heater core and a rear wall of the casing;

an air-introducing port of the aspirator is open to the hot air duct or to a space above the hot air duct; and

the hot air duct is always communicating with the air-mixing space irrespective of opening or closing positions of the face door and the foot door.

5. The air-conditioner as in claim 4, wherein:

the face opening is disposed at an upper-rear portion of the casing; and

a communication passage communicating between the air-mixing space and the hot air duct is formed when the face door opens the face opening.

6. The air-conditioner as in claim 4, wherein:

the foot door is driven to open or close the foot opening, sliding on an inside surface of the sidewall.

7. The air-conditioner as in claim 4, wherein:

the aspirator is mounted on the rear wall of the casing.

8. The air-conditioner as in claim 4, wherein:

the aspirator is mounted on the sidewall of the casing at a position communicating with the hot air duct or an upper space above the hot air duct.